

# Упражнение 1

```
drom.cpp  aaa.cpp  Task_1.cpp X  Task_3.cpp  Задача_1.exe  Task_2.cpp  Упражнение_1.exe

Homework_2 > Task_1.cpp > main()
int main () {

ПРОБЛЕМЫ  ВЫХОДНЫЕ ДАННЫЕ  КОНСОЛЬ ОТЛАДКИ  ТЕРМИНАЛ  ПОРТЫ

PS C:\C++> cd 'c:\C++\Homework_2\output'
PS C:\C++\Homework_2\output> & .\"Task_1.exe'
Enter the first number (10-1000)
280
Enter the second number (10-1000)
350
The sum of dividers is 1464
The product of numbers of the divisors is 192
The sum of the product of the odd divisors of the first number and the even divisors of the second number is 1721
The GCF is 70
PS C:\C++\Homework_2\output> |
```

## Упражнение 2

```
Choose the option:
-----
1- Enter a number in the range between 1000 and 999999999
2- Print the digits of the number
3- Count how many digits the number has
4- Return the lowest and highest digits of the number
5- Return the sum of the digits of the number
6- Return the product of the odd digits
7- Calculate the inverted version of the number
-----
1
Enter the number:
995
Try again
Enter the number:
1002
Do you want to continue? [Y/N]
Y
Choose the option:
-----
1- Enter a number in the range between 1000 and 999999999
2- Print the digits of the number
3- Count how many digits the number has
4- Return the lowest and highest digits of the number
5- Return the sum of the digits of the number
6- Return the product of the odd digits
7- Calculate the inverted version of the number
-----
|
```

```
Choose the option:
-----
1- Enter a number in the range between 1000 and 999999999
2- Print the digits of the number
3- Count how many digits the number has
4- Return the lowest and highest digits of the number
5- Return the sum of the digits of the number
6- Return the product of the odd digits
7- Calculate the inverted version of the number
-----
2
Enter the number:
79623
Digits of the number:
3 2 6 5 7
Do you want to continue? [Y/N]
Y
Choose the option:
-----
1- Enter a number in the range between 1000 and 999999999
2- Print the digits of the number
3- Count how many digits the number has
4- Return the lowest and highest digits of the number
5- Return the sum of the digits of the number
6- Return the product of the odd digits
7- Calculate the inverted version of the number
-----
3
Enter the number:
2781
Number of digits: 5
Do you want to continue? [Y/N]
```

```
Choose the option:
-----
1- Enter a number in the range between 1000 and 999999999
2- Print the digits of the number
3- Count how many digits the number has
4- Return the lowest and highest digits of the number
5- Return the sum of the digits of the number
6- Return the product of the odd digits
7- Calculate the inverted version of the number
-----
4
Enter the number:
262712
Max digit: 7 Min digit: 1
Do you want to continue? [Y/N]
Y
Choose the option:
-----
1- Enter a number in the range between 1000 and 999999999
2- Print the digits of the number
3- Count how many digits the number has
4- Return the lowest and highest digits of the number
5- Return the sum of the digits of the number
6- Return the product of the odd digits
7- Calculate the inverted version of the number
-----
5
Enter the number:
746421
The sum of digits: 24
Do you want to continue? [Y/N]
```

```
Choose the option:
-----
1- Enter a number in the range between 1000 and 999999999
2- Print the digits of the number
3- Count how many digits the number has
4- Return the lowest and highest digits of the number
5- Return the sum of the digits of the number
6- Return the product of the odd digits
7- Calculate the inverted version of the number
-----
6
Enter the number:
261223
The product of the odd digits: 3
Do you want to continue? [Y/N]
Y
Choose the option:
-----
1- Enter a number in the range between 1000 and 999999999
2- Print the digits of the number
3- Count how many digits the number has
4- Return the lowest and highest digits of the number
5- Return the sum of the digits of the number
6- Return the product of the odd digits
7- Calculate the inverted version of the number
-----
7
Enter the number:
123456
Reversed version of the number: 654321
Do you want to continue? [Y/N]
n
PS C:\C++\Homework_2\output> |
```

## Упражнение 3

```
Enter the number of progression terms:
28
Choose the option:
-----
1- e^x
2- ln(x)
3- sin(x)
4- cos(x)
5- 1/(1-x)^2
-----
1
Enter the value of x:
0
Series terms:
1.8 2.43 2.916 3.2805 3.54294 3.72009 3.82638 3.8742 3.8742 3.83546 3.76573 3.67158 3.55861 3.43152 3.29426 3.15013 3.00189 2.8518 2.7017 2.55311 2.4
0722 2.26497 2.12711 1.99416 1.86653 1.74449 1.62819 1.51771 1.41304 1.31413 1.22087 1.13312 1.05071 0.973449 0.901136 0.833551 0.770471 0.711672 0.6
56928 0.606016 0.558717 0.514818 0.474112 0.436398 0.401486 0.369193 0.339343 0.311772 0.286321 0.262843 0.241197 0.221252 0.202884 0.185977 0.170422
0.156119 0.142972 0.130893 0.119801 0.109618 0.100273 0.0917014 0.0838413 0.0766362 0.0700337 0.0639853 0.0584663 0.0533752 0.0487339 0.0444871 0.04
06023 0.0370496 0.0338014 0.0308324 0.0281191 0.0256402 0.0233759 0.021308 0.01942 0.0176654 0.0161234 0.014688 0.0133785 0.012184 0.0110946 0.010101
2 0.00919562 0.0083701 0.00761773 0.00693214 0.00630748 0.00573844 0.00522013 0.0047481 0.00431827 0.00392693 0.00357067 0.00324639 0.00295127 0.0026
027
Result: 99.9735
PS C:\C++\Homework_2\output> |
```

```
Enter the number of progression terms:
28
Choose the option:
-----
1- e^x
2- ln(x)
3- sin(x)
4- cos(x)
5- 1/(1-x)^2
-----
1
Enter the value of x:
1.57
Series terms:
-0.64492 0.679988 0.00666327 0.000150711 3.17026e-06 5.05479e-08 -6.53756e-10 8.05486e-12 -8.1351e-14 2.54413e-16 -1.20036e-18 5.0915e-21 -1.7077
5e-23 5.40896e-26 -1.40836e-28 3.75746e-31 0.59433e-34 1.20023e-36 -2.14073e-39 3.21796e-42
Result: 1
PS C:\C++\Homework_2\output> |
PS C:\C++\Homework_2\output> & .\"Task_3.exe'
Enter the number of progression terms:
28
Choose the option:
-----
1- e^x
2- ln(x)
3- sin(x)
4- cos(x)
5- 1/(1-x)^2
-----
4
Enter the value of x:
1.57
Series terms:
-1.1145 0.217156 -0.620801 0.00015539 -2.50746e-09 4.6812e-07 -6.38142e-09 5.52191e-11 -5.2613e-13 3.40392e-15 -1.85628e-17 8.10748e-20 -3.07440e-
22 1.00042e-24 -2.44805e-27 7.06059e-30 -1.50313e-32 3.01266e-35 -5.121e-38 8.40119e-41
Result: 0.0006027
PS C:\C++\Homework_2\output> |
```

```
100
Choose the option:
-----
1- e^x
2- ln(x)
3- sin(x)
4- cos(x)
5- 1/(1-x)^2
-----
5
Enter the value of x:
0.9
Series terms:
1.8 2.43 2.916 3.2805 3.54294 3.72009 3.82638 3.8742 3.8742 3.83546 3.76573 3.67158 3.55861 3.43152 3.29426 3.15013 3.00189 2.8518 2.7017 2.55311 2.4
0722 2.26497 2.12711 1.99416 1.86653 1.74449 1.62819 1.51771 1.41304 1.31413 1.22087 1.13312 1.05071 0.973449 0.901136 0.833551 0.770471 0.711672 0.6
56928 0.606016 0.558717 0.514818 0.474112 0.436398 0.401486 0.369193 0.339343 0.311772 0.286321 0.262843 0.241197 0.221252 0.202884 0.185977 0.170422
0.156119 0.142972 0.130893 0.119801 0.109618 0.100273 0.0917014 0.0838413 0.0766362 0.0700337 0.0639853 0.0584663 0.0533752 0.0487339 0.0444871 0.04
06023 0.0370496 0.0338014 0.0308324 0.0281191 0.0256402 0.0233759 0.021308 0.01942 0.0176654 0.0161234 0.014688 0.0133785 0.012184 0.0110946 0.010101
2 0.00919562 0.0083701 0.00761773 0.00693214 0.00630748 0.00573844 0.00522013 0.0047481 0.00431827 0.00392693 0.00357067 0.00324639 0.00295127 0.0026
027
Result: 99.9735
PS C:\C++\Homework_2\output> |
```